REMARKS

Claims 1-39 were previously pending in this patent application. Claims 1-39 stand rejected. Herein, Claims 1, 12, 16, 18, 26, 28, and 30 have been amended. Accordingly, after this Amendment and Response, Claims 1-39 remain pending in this patent application. Further examination and reconsideration in view of the arguments set forth below is respectfully requested.

Attached hereto is a marked-up version of the changes made to the patent application by the current amendment. The attached page is captioned "**Version With Markings To Show Changes Made.**"

35 U.S.C. Section 103(a) Rejections

Claims 1-39 stand rejected under 35 U.S.C. 102(e) as being unpatentable over Monteiro et al., U.S. Patent No. 6,434,622 (hereafter Monteiro) in view of Ice, U.S. Patent No. 5,884,031 (hereafter Ice) . These rejections are respectfully traversed.

Independent Claim 1 recites:

> A communication system comprising:
> a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and ***wherein each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT***;

a plurality of primary broadcast servers coupled to the Internet, each for originating respective primary broadcast information that is chaincast among a group of IRRTs of said plurality of IRRTs; and

a chaincast manager coupled to said Internet and for registering said plurality of primary broadcast servers and for scheduling information transfers of said respective primary broadcast information to IRRTs based on broadcast requests generated by said IRRTs to said chaincast manager. (emphasis added)

It is respectfully asserted that there is no suggestion, motivation, or teaching found in Monteiro and Ice to combine them. Moreover, the combination of Monteiro and Ice does not teach, suggest, or motivate all the limitations in Independent Claim 1.

It is respectfully asserted that Monteiro does not disclose the present invention as recited in Independent Claim 1. In particular, Monteiro is directed to a system comprising a Network Control Center 10, a plurality of Primary servers 20, Media Servers 30, Users 40 and Control Servers 50 and an Administration Server 60. In Monteiro, the Primary Servers 20 forward information via the network to a number of Media Servers 30. [Monteiro; Figure 1; Figure 3; Col. 2, line 65 - Col. 3, line 25]. Moreover, a Media Server 30 which receives a stream of information from a Primary Server 30 may forward that stream via the network to another Media Stream 30 which then forwards it to a User 40. Id. Additionally, Monteiro discloses a hierarchical distribution architecture having a Primary Server 20, Multicast Routers 70, and Users 40. [Monteiro; Figure 4; Col. 6, lines 35-55]. Moreover, the Primary Server 20 transmits packets of information while the Multicast Routers 70 forward the packets across the Internet to other Multicast Routers 70 such that all Users 40

eventually receive a copy of the packet from a Multicast Router 70. Id. However, Monteiro does not disclose a device for receiving and rendering broadcast information and retransmitting the broadcast information.

Moreover, it is respectfully asserted that Ice does not disclose the present invention as recited in Independent Claim 1. In particular, Ice does not disclose that the clients in the private network have a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another client.

Unlike Monteiro and Ice, Independent Claim 1 is directed to a communication system having a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT has a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT. While Monteiro is directed to a system having devices that receive and forward information but do not render the information, Independent Claim 1 is directed to a communication system having information receiver and retransmitter devices (IRRTs) for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT. Moreover, While Ice discloses clients that form a private network, Independent Claim 1 is

directed to IRRTs that have a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT. Therefore, it is respectfully submitted that Independent Claim 1 is patentable over Monteiro and Ice and is in condition for allowance.

Dependent Claims 2-11 are dependent on allowable Independent Claim 1, which is allowable over Monteiro and Ice. Hence, it is respectfully submitted that Dependent Claims 2-11 are patentable over Monteiro and Ice for the reasons discussed above.

With respect to Independent Claim 12, it is respectfully submitted that Independent Claim 12 recites similar limitations as in Independent Claim 1. In particular, the communication system of Independent Claim 12 includes a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT has a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT. Therefore, Independent Claim 12 is allowable over Monteiro and Ice for reasons discussed in connection with Independent Claim 1.

Dependent Claims 13-15 are dependent on allowable Independent Claim 12, which is allowable over Monteiro and Ice. Hence, it is respectfully

submitted that Dependent Claims 13-15 are patentable over Monteiro and Ice for the reasons discussed above.

With respect to Independent Claim 16, it is respectfully submitted that Independent Claim 16 recites similar limitations as in Independent Claim 1. In particular, the method of Independent Claim 16 includes the step of causing a primary server to communicate a first stream of data packets representing primary broadcast information to a first user device and rendering the primary broadcast information thereon, and the step of causing the first user device to communicate a third stream of data packets representing the primary broadcast information to a third user device and rendering the primary broadcast information thereon, and wherein each user device has a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device. Therefore, Independent Claim 16 is allowable over Monteiro and Ice for reasons discussed in connection with Independent Claim 1.

Dependent Claims 17-25 are dependent on allowable Independent Claim 16, which is allowable over Monteiro and Ice. Hence, it is respectfully submitted that Dependent Claims 17-25 are patentable over Monteiro and Ice for the reasons discussed above.

With respect to Independent Claim 26, it is respectfully submitted that Independent Claim 26 recites similar limitations as in Independent Claim 1. In

particular, the method of Independent Claim 26 includes the step of causing a Web server to communicate a first stream of data packets representing content of an URL to a first user device and causing the first user device to render the content thereon, and the step of causing the first user device to communicate a second stream of data packets representing the content of the URL to a second user device and causing the second user device to render the content thereon, and wherein the user devices include a transmission buffer having a buffer forward portion for storing data packets to be rendered and a buffer past portion for storing data packets that have been rendered and can be retransmitted to another user device. Therefore, Independent Claim 26 is allowable over Monteiro and Ice for reasons discussed in connection with Independent Claim 1.

Dependent Claims 27-29 are dependent on allowable Independent Claim 26, which is allowable over Monteiro and Ice. Hence, it is respectfully submitted that Dependent Claims 27-29 are patentable over Monteiro and Ice for the reasons discussed above.

With respect to Independent Claim 30, it is respectfully submitted that Independent Claim 30 recites similar limitations as in Independent Claim 1. In particular, the communication system of Independent Claim 30 includes a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is operable to receive broadcast information, operable to render a portion of the broadcast information and configured to retransmit a portion of the broadcast information to another IRRT, and wherein

each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT. Therefore, Independent Claim 30 is allowable over Monteiro and Ice for reasons discussed in connection with Independent Claim 1.

Dependent Claims 31-39 are dependent on allowable Independent Claim 30, which is allowable over Monteiro and Ice. Hence, it is respectfully submitted that Dependent Claims 31-39 are patentable over Monteiro and Ice for the reasons discussed above.

CONCLUSION

It is respectfully submitted that the above arguments and remarks overcome all rejections. For at least the above presented reasons, it is respectfully submitted that all remaining claims (Claims 1-39) are now in condition for allowance.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,

WAGNER, MURABITO & HAO, LLP

Dated: 7/21/2003

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Version With Markings To Show Changes Made

IN THE CLAIMS

Claims 1, 12, 16, 18, 26, 28, and 30 have been amended as follows:

1. (Twice amended) A communication system comprising:

a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT;

a plurality of primary broadcast servers coupled to the Internet, each for originating respective primary broadcast information that is chaincast among a group of IRRTs of said plurality of IRRTs; and

a chaincast manager coupled to said Internet and for registering said plurality of primary broadcast servers and for scheduling information transfers of said respective primary broadcast information to IRRTs based on broadcast requests generated by said IRRTs to said chaincast manager.

12. (Twice Amended) A communication system comprising:

a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to

another IRRT, and wherein each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT;

a plurality of primary broadcast servers coupled to the Internet and each for originating respective radio broadcast information that is chaincast among a group of IRRTs;

a plurality of secondary broadcast servers coupled to the Internet and each for originating respective advertisement broadcast information that is chaincast among a group of IRRTs; and

a chaincast manager coupled to said Internet and for registering said plurality of primary and secondary broadcast servers and for scheduling information transfers of said radio broadcast information to IRRTs based on broadcast requests generated by said IRRTs to said chaincast manager and wherein said chaincast manager is also for supplying a respective IRRT with a list of all registered primary broadcast servers in response to a request by said respective IRRT for said list.

16. (Once Amended) A method of communicating broadcast information over the Internet comprising the steps of:

a) causing a primary server to communicate a first stream of data packets representing primary broadcast information to a first user device and rendering said primary broadcast information thereon, wherein said server and said first user device are coupled to the Internet, and wherein said first user device includes a first transmission buffer having a buffer forward portion for

storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device;

b) causing said server to communicate a second stream of data packets representing said primary broadcast information to a second user device and rendering said primary broadcast information thereon, wherein said second user device is coupled to the Internet and configured for rendering said primary broadcast information, and wherein said second user device includes a second transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device;

c) causing said first user device to communicate a third stream of data packets representing said primary broadcast information to a third user device and rendering said primary broadcast information thereon, wherein said third user device is coupled to the Internet and configured for rendering said primary broadcast information, and wherein said third user device includes a third transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device;

d) monitoring a packet rate of said third stream; and

f) in response to said packet rate falling below a pre-determined rate, causing said second user device to communicate a fourth stream of data

packets representing said primary broadcast information to said third user device.

18. (Once Amended) A method as recited in Claim 16 further comprising the steps of:

adding a fourth user device on the Internet; and

causing said third user device to communicate a fifth stream of data packets representing said primary broadcast information to said fourth user device, and wherein said fourth user device includes a fourth transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device.

26. (Once Amended) A method of communicating Web content over the Internet comprising the steps of:

a) causing a Web server to communicate a first stream of data packets representing content of an URL (Universal Resource Locator) to a first user device and causing said first user device to render said content thereon when said URL is accessed by said first user device, and wherein said first user device includes a first transmission buffer having a buffer forward portion for storing data packets to be rendered and a buffer past portion for storing data packets that have been rendered and can be retransmitted to another user device; and

b) causing said first user device to communicate a second stream of data packets representing said content of said URL to a second user device and

causing said second user device to render said content thereon when said second user device accesses said URL pseudo-simultaneously with said first user device, and wherein said second user device includes a second transmission buffer having a buffer forward portion for storing data packets to be rendered and a buffer past portion for storing data packets that have been rendered and can be retransmitted to another user device.

28. (Once Amended) The method according to Claim [25] 26 wherein said first user device [,] and said second user device [and said third user device] each comprises a computer system.

30. (Once Amended) A communication system comprising:

a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet and wherein each IRRT is operable to receive broadcast information, operable to render a portion of said broadcast information and configured by a chaincast manager to selectively retransmit a portion of said broadcast information to another IRRT, and wherein each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT;

a plurality of primary broadcast servers coupled to the Internet, each operable to originate respective primary broadcast information that is chaincast among a group of IRRTs of said plurality of IRRTs;

a plurality of secondary broadcast servers coupled to the Internet and each operable to originate respective secondary broadcast information that is chaincast among a group of IRRTs of said plurality of IRRTs; and

wherein said chaincast manager is coupled to said Internet and operable to register said plurality of primary and secondary broadcast servers and operable to schedule information transfers of said respective primary broadcast information to IRRTs based on broadcast requests generated by said IRRTs to said chaincast manager.